

#### **DEPARTMENT Of Science**

#### COURSE OUTLINE - Winter 2024

CS3990 (A3): Web Based Internet Technology – 3 (3-0-3) UT

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land, and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR: Dr. Mohamed Elgamal PHONE: 780-539-2976

OFFICE: C306 E-MAIL: melgamal@nwpolytech.ca

OFFICE HOURS: WR 10:00-12:00 (by appointment)

#### CALENDAR DESCRIPTION:

This course introduces students to various aspects of Internet and web technologies such as HTML/XHTML, CSS, XML, and JavaScript through research and project related assignments. The exact topics covered in this course will be at the discretion of the instructor.

# PREREQUISITE(S)/COREQUISITE: CS2010

#### REQUIRED TEXT/RESOURCE MATERIALS:

- "Web Programming Step-by-Step" 2<sup>nd</sup> Edition, M Stepp, J Miller, and V Kirst
- Jon Duckett, "JavaScript & jQuery".
- Jon Duckett, "HTML & CSS". Web resources will also be frequently used, such as, w3schools.com, css-tricks.com, php.net, jquery.com, etc. Please note that this is not a complete list; more resources will be added when necessary.
- Other resources will also be available on BrightSpace.



**DELIVERY MODE(S):** In-Person, On-Campus

This course includes 3-hours of lecture per week and a 3-hour lab per week.

**Lectures:** G112 TR 13:00 – 14:20

**Lab: L1** G112 TBD

# **LEARNING OUTCOMES:**

As a result of taking this course, students will gain the ability to:

- Create both static and dynamic web applications.
- Create secure web-based applications that have both a client and server component and can interact with databases

#### TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <a href="http://www.transferalberta.alberta.ca">http://www.transferalberta.alberta.ca</a>.

#### **EVALUATIONS:**

Your final grade will be determined in the following manner:

Lab Assignments	30%
Midterm Exams (2 or 3)	30%
Project	10%
Final Exam	30%

<sup>\*\*</sup> Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.



Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**. **Grading Chart:** 

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100	C+	2.3	67-69
А	4.0	85-94	С	2.0	63-66
Α-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
В	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

## COURSE SCHEDULE/TENTATIVE TIMELINE:

- HTML Basics
- Cascading Style Sheets (CSS)
- Page Layout and Forms
- JavaScript, Event handling and DOM
- Ajax, XML, JSON
- Server-side programming PHP, Databases, SQL
- Web Security
- Project Developing and Demonstration

#### STUDENT RESPONSIBILITIES:

Students are responsible for all lecture material, labs and readings. If the final is missed due to illness it will be deferred. A doctor's note or a phone message or email will be required in both cases.

It is the student's responsibility to adhere to ALL requirements of the assignments. Students are expected to arrive on time for both class and lab. If students are consistently late, they may be barred from attending future classes

Assignments MUST be submitted on their due date. Late assignments will NOT be accepted and will receive a grade of 0.



## STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available

at <a href="https://www.nwpolytech.ca/about/administration/policies/index.html">https://www.nwpolytech.ca/about/administration/policies/index.html</a>.

#### Additional Information:

Some of the exams are programming tasks to measure the students' skills and will be during the lab or class time.

<sup>\*\*</sup>Note: all Academic and Administrative policies are available on the same page.